AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 1. This sheet replaces the original sheet including Fig. 1. In Fig. 1, the portion of analysis platform 23 in on-site monitor 21 has been amended to specifically show the CDE software 24, and the portion of analysis platform 23 in central management system 25 has been amended to specifically show CCE software 34.

A marked-up copy of Fig. 1 is also being submitted herewith.

REMARKS

Reconsideration of this application is respectfully requested. Claims 1-44 are pending in the application. Upon entry of this Amendment, Figure 1 of the drawings will be amended, paragraphs 15 and 26 of the application specification will be amended, the Abstract will be amended, claims 1, 4, 5, 8, 11, 12, 13, 15, 17, 18, 24, 26-29, 31, 34, 40 and 41 will be amended, and claims 39, and 42-44 will be canceled.

In the outstanding Office Action of February11, 2005, the Examiner objected to the drawings and suggested that Figure 1 be amended so that reference numeral "24" and "34" identify a component inside the "Analysis Platform" illustrating the "CDE Software" and the "CCE Software", respectively. The amendment to Figure 1 proposed by the Examiner has now been made. Accordingly, the Examiner's objection to the drawings should be withdrawn.

The Examiner also objected to the Abstract of the Disclosure because its length exceeds a 150 word limit. The Abstract has now been amended to reduce the word count. Accordingly, the Examiner's objection to the Abstract should now be withdrawn.

The Examiner further objected to the application specification because of certain informalities, suggesting that certain reference numerals in paragraphs 15 and 26 of the specification be amended. The amendments proposed by the Examiner have now been

made to paragraphs 15 and 26. Accordingly, the Examiner's objection to the specification should be withdrawn.

The Examiner also objected to numerous claims because of certain informalities involving problems of antecedent bases perceived by the Examiner. Claims 1, 4, 5, 8, 11, 13, 15, 18, 24, 27, 29, 31, 34, and 40 have now been amended as suggested by the Examiner to otherwise overcome the Examiner's objection. In view of these amendments and the cancellation of claims 39 and 42-44, the Examiner's objections to such claims should now be withdrawn.

The Examiner also objected to claims 11-15, 17, 26, 28-31, 34, 35 and 38-44 under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 11, 12, 17, 26, 28, 34, and 40 have now been amended to overcome the Examiner's concerns regarding vagueness. In view of these amendments and the cancellation of claims 39 and 42-44, the Examiner's §112 rejection of these claims and claims 13-15, 29-31, 35, 38, 41 and 43 should be withdrawn.

The Examiner also rejected claims 1-44 under 35 U.S.C. §103(a) as being unpatentable over Johnson *et al.* (USP No. 6,553,336) in view of Horn *et al.* (U.S. Patent Application Publication No. 2001/0053940) alone or further in view of Ruffolo *et al.* (USP No. 6,041,288) alone, Billington *et al.* (USP No. 5,963,884) alone, or Billington and Ruffolo. The Examiner's rejections are respectfully traversed.

For a claimed invention to be obvious over a combination of prior art references, there must be some suggestion, motivation or teaching in the prior art that would have led one of ordinary skill in the art to combine the references to produce the claimed invention. *E.g., Ashland Oil, Inc. v. Delta Resins & Refracs.*, 776 F.2d 281, 293 (Fed. Cir. 1985) (Emphasis added). Here, the claimed invention of the present application is not obvious over the references cited against the claims by the Examiner because, even assuming, *arguendo*, that the Examiner properly identified some suggestion, motivation or teaching in the cited references that would have led one of ordinary skill in the art to properly combine the references, as argued by the Examiner, the resulting combination still would not be the claimed invention because such references, when so combined, do not include all of the features of the rejected claims.

Each of independent claims 1, 18, 34 and 40 recites, or has been amended to recite, the use of a plurality of coaching tools using operating data collected from power generation equipment, determinations that predefined events occurred during operation of the power generation equipment, and historical data pertaining to the operation of fleet power generation equipment to decide how to respond to the occurrence of predefined events in the monitored power generation equipment. Independent claims 1, 18, 34 and 40 have now been amended to clarify that the system and method of the present invention displays the coaching tools at the on-site monitor to assist operators located at the on-site monitor to respond to a time-critical predefined event occurring in the power generation

equipment in an expedited timeframe, and at the remote management to allow members of the remote management system to respond to a non-time-critical predefined event occurring in the power generation equipment in a timeframe that is not expedited. Support for such amendments to independent claims 1, 18, 34 and 40 appears at at least pages 10 and 16 of the present application's specification.

The Johnson *et al.* patent (USP 6,553,336), the primary reference cited by the Examiner in his §103(a) rejections of the claims, does not disclose or suggest at least the foregoing features of the present invention recited in amended independent claims 1, 18, 34 and 40. Johnson discloses a remote monitoring system, generally shown in Figures 1 and 2 of Johnson, that includes a plurality of transducers 10 for measuring specific characteristics or parameters of property and/or equipment, a transducer control module 14 that receives and analyzes transducer measurements and detects alarm conditions, a monitoring system 20 that receives, stores and analyzes information received from the transducer control module 14 via a wide area network 18 and a communications device 16, and a plurality end-user display terminals 22 that receive reports of information from the monitoring system 10. The transducers 10 can be sensors and/or actuators. Johnson, col. 4, ln. 17. The transducer actuators can be used "to control the state of an object, for example, controlling power to a device remotely via terminal 22." Johnson, col. 4, lns. 14-17. Thus, an end-user monitors and controls property or equipment through an end-user display terminal 22 that communicates with transducer sensors/actuators 10 through

transducer control module 14 and monitoring system 20. *See, e.g.*, Johnson, col. 15, lns. 59-63; s*ee also,* Johnson, generally at cols. 18-20. This is different from the claimed invention described in independent claims 1, 18, 34 and 40, wherein the on-site monitor/first analyzing means and the remote management system/second analyzing means display coaching tools that are used by persons at such locations to decide how to respond to either a time-critical predefined event or a non-time-critical predefined event occurring in the monitored power generation equipment.

Nowhere in Johnson is there a disclosure or suggestion of a plurality of coaching tools to decide how to respond to a predefined event, or decisional control at the transducer control unit 14, or the monitoring system 20 of how to respond to a predefined event occurring in the monitored equipment.

Portions of Johnson cited by the Examiner as disclosing the coaching tools recited in the claims, *e.g.*, Johnson, col. 15, lns. 54-59 and 61-66, col. 16, lns. 11-13 and col. 21, lns. 39-42 do not, in fact, disclose or suggest the claimed coaching tools. The portion of Johnson cited at column 15 discusses the monitoring system 20 and the functions it performs. There is no discussion at column 15 of coaching tools used to decide how to respond to a predefined event. The portion of Johnson cited at column 16 briefly talks about the components comprising monitoring system 20, which includes a monitor application 21, a database 25 and a web server 23 that allow an end user to interact with monitoring system 20 over a wide area network, such as the Internet. The portion of

Johnson cited at column 21 discusses the transducers and how changes in trends for any of the sensors monitored by the transducers can result in an alarm notification. But, here again, there is no discussion of coaching tools for deciding how to respond to a predefined event.

The secondary and tertiary references cited by the Examiner do not compensate for the deficiencies in the teachings of Johnson noted above.

In rejecting claims 1-7, 9, 10, 12-14, 16, 17, 34-38, 40 and 41 under 35 U.S.C. §103(a) as being unpatentable over Johnson in view of Horn, the Examiner looks to Horn as disclosing "a method and system for assessing plant parameters and performance over a global network including means of obtaining operating data of power generation equipment . . .for comparison with historical fleet power generation data . . .." The paragraphs cited by the Examiner to support his argument regarding the teachings of Horn, *i.e.*, 0002-0004 and 0034, do not, in fact, pertain to power generation equipment. Rather, such paragraphs discuss assessing boiling water reactor plant parameters and performance and maintaining a historical database of such parameter and performance data that is used to assess reactor performance and predict reactive behavior. Clearly, the portion of Horn cited by the Examiner does not disclose or suggest the use of a plurality of coaching tools that are displayed at either an on-site monitor or a remote management system to assist either operators located at the on-site monitor to respond to a time-critical predefined event occurring in the power generation equipment in a timeframe that is

expedited or members of the remote management system to respond to a non-time-critical predefined event in the power generation equipment in a timeframe that is not expedited.

In rejecting claims 8 and 15 under §103(a) as being unpatentable over Johnson in view of Horn and further in view of Ruffolo, and claims 24 and 31 under §103(a) as being unpatentable over Johnson in view of Horn and Billington and further in view of Ruffolo, the Examiner looked to Ruffolo as teaching a method and apparatus for evaluating AC power distribution equipment including means for determining equipment operational data and comparing the operational data with equipment operating data provided by manufacturers of the equipment to determine whether any sensor data exceeds the manufacturer's operating limits and/or is within the manufacturer's range for the equipment. The Examiner also looks to Ruffolo to teaching the issuing of an alarm after current operational data is outside a manufacturer's range. While Ruffolo discloses a technique for evaluating AC power distribution equipment in a facility by comparing test data for the equipment with a range of manufacturers specified, and/or standards organization recommended operating parameters for the equipment, the cited portion of Roffolo does not disclose the use of a plurality of coaching tools to decide how to respond to a predefined event in power generation equipment wherein the coaching tools are displayed either at an on-site monitor or a remote management system, depending on whether the predefined event is a time-critical one requiring a response in an expedited timeframe or a non-time-critical one not requiring a response in an expedited timeframe.

In his rejection of claims 11, 18-23, 25-30, 32, 33, 39 and 42-44 under §103(a) as being unpatentable over Johnson in view of Horn and further in view of Billington, the Examiner looked to Billington as teaching (1) a predicted maintenance system including a plurality of remote data acquisition nodes connected to a central control computer for performing the control and monitoring activities of a plurality of devices, (2) a display for allowing a user to view monitoring results, (3) the use of controlled commands for collecting, viewing, statistical trending, and analyzing obtained data to distinguish between an event that requires immediate/expedited attention and an event that does not require such immediate/expedited attention, and (4) a monitoring application that determines a likely cause of an event and an action plan for responding to the event.

Billington discloses a predictive maintenance system for a plurality of machines in which vibration sensors are connected to the machines in a plurality of data acquisition nodes that acquire vibration data from the sensors during data acquisition intervals. While Billington discloses, at col. 7, lns. 29-47, the use of an "Analyze Data" button to obtain an "Analysis Results" screen which includes text that provides a user with an identification of possible causes of potential failures and recommended actions for remedying the problem, the portions of Billington cited by the Examiner do not disclose or teach a system for detecting predefined events occurring in operating power generation equipment wherein a plurality of coaching tools for deciding how to respond to a predefined event are displayed at an on-site monitor to assist operators located at the on-

site monitor to respond to a time-critical predefined event in an expedited timeframe and at a central management system to allow members located at the central management system to respond to a non-time-critical predefined event in a timeframe that is not expedited.

In sum, the system and method of monitoring the occurrence of predefined events in power generation equipment described in independent claims 1, 18, 34 and 40 are not rendered obvious by the teachings of Johnson, either alone, or in combination with the secondary and tertiary references cited by the Examiner. As such, the dependent claims remaining in the application which depend either directly or indirectly from independent claims 1, 18, 34 and 40, *i.e.*, claims 2-17, 19-33, 35-38, 41 and 42, are also not rendered obvious by the references cited by the Examiner.

In view of the foregoing, it is now believed that all of the claims remaining in the application, *i.e.*, claims 1-38, and 40-42, are now in condition for allowance, which action

is earnestly solicited. If any issues remain in this application, the Examiner is urged to contact the undersigned at the telephone number listed below.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: Robert A. Molan

Robert A. Molan
Reg. No. 29,834

RAM:drt
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

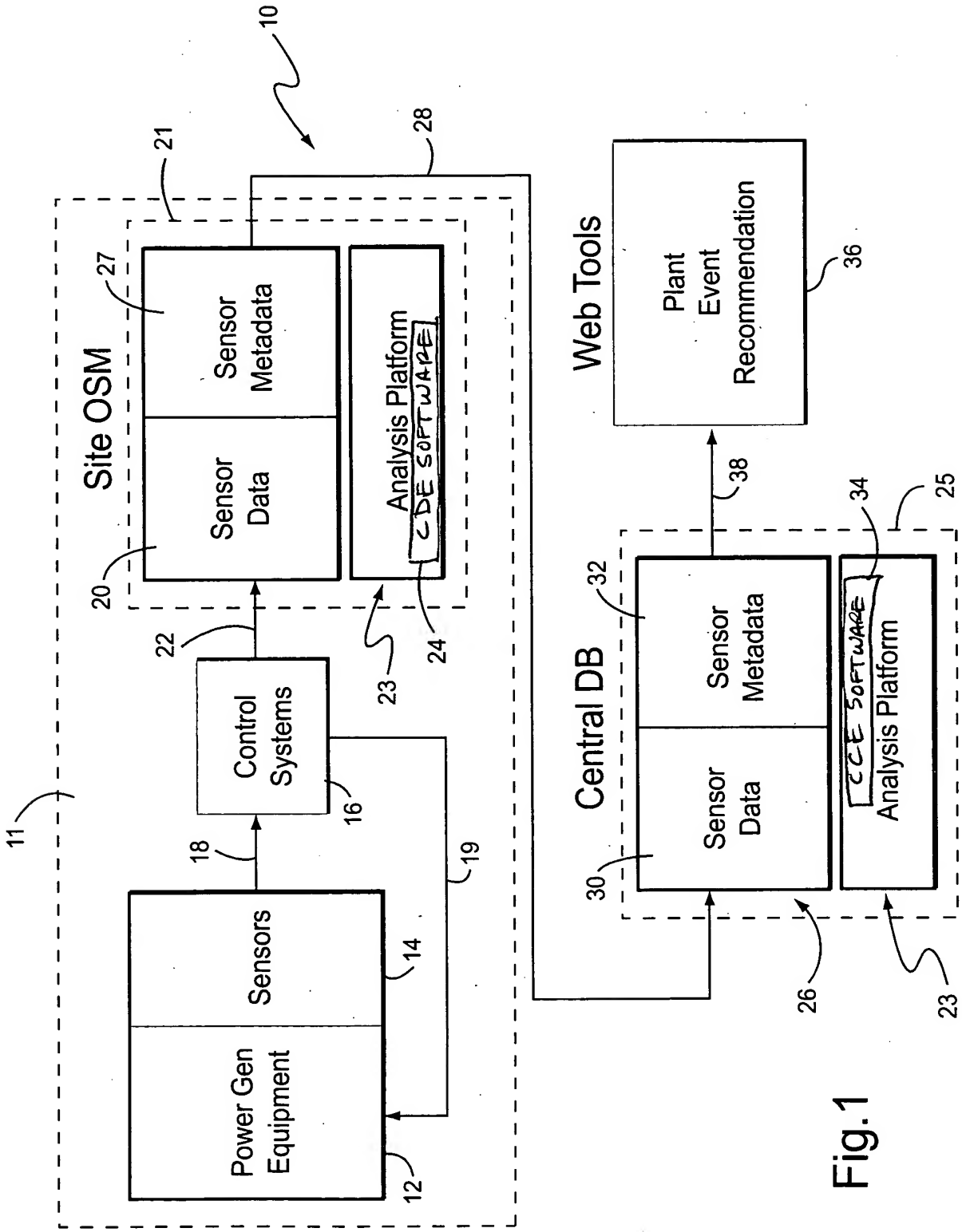
10
11
12
14
16
18
19
20
21
22
23
24
25
26
27
28
30
32
34
36
38
Site OSM
Sensor Data
Sensor Metadata
Analysis Platform
CDE SOFTWARE
Control Systems
Power Gen Equipment
Sensors
Web Tools
Plant Event Recommendation
Central DB
Sensor Data
Sensor Metadata
CCE SOFTWARE
Analysis Platform

Fig.1